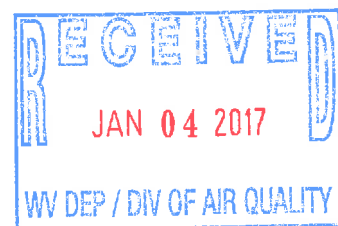


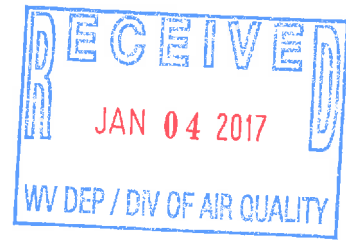
RENEWAL APPLICATION FOR A WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
TITLE V PERMIT FOR THE MARTINSBURG  
COMPUTING CENTER AND ANNEX

Submitted By:  
U.S. Department of the Treasury  
Internal Revenue Service  
Enterprise Computing Center – Martinsburg  
250 Murall Drive  
Kearneysville, WV 25430

Resubmitted To:  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304

December 2016





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## 1.0 Introduction

The U.S. Department of the Treasury, Internal Revenue Service (IRS) operates the Martinsburg Computing Center located in Kearneysville, West Virginia. The existing facility consists of two buildings; the Main Building and the Annex /Annex Office Expansion. The Main Building is owned by the general Services Administration (GSA) with delegated operations by the IRS. The IRS is submitting the renewal application for a Title V Permit to the West Virginian Department of Environmental Protection (WVDEP) Department of Air Quality for processing. Provided in the following sections is the renewal application and attachments as required.



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL  
PROTECTION

DIVISION OF AIR QUALITY

601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
Phone: (304) 926-0475  
[www.dep.wv.gov/daq](http://www.dep.wv.gov/daq)



INITIAL/RENEWAL TITLE V PERMIT APPLICATION - GENERAL FORMS

Section 1: General Information

<b>1. Name of Applicant (As registered with the WV Secretary of State's Office):</b> US DEPARTMENT OF THE TREASURY, INTERNAL REVENUE SERVICE	<b>2. Facility Name or Location:</b> Martinsburg Computing Center – Main Building & Annex 250 Murall Drive MS#2225 Kearneysville, WV 25430
<b>3. DAQ Plant ID No.:</b>  003-00133	<b>4. Federal Employer ID No. (FEIN):</b>  55-1782822
<b>5. Permit Application Type:</b>  <input type="checkbox"/> Initial Permit <input checked="" type="checkbox"/> Permit Renewal <input type="checkbox"/> Update to Initial/Renewal Permit Application  When did operations commence? 09/29/2008 What is the expiration date of the existing permit? 09/22/2015	
<b>6. Type of Business Entity:</b>  <input type="checkbox"/> Corporation <input checked="" type="checkbox"/> Governmental Agency <input type="checkbox"/> LLC <input type="checkbox"/> Partnership <input type="checkbox"/> Limited Partnership	<b>7. Is the Applicant the:</b>  <input type="checkbox"/> Owner <input checked="" type="checkbox"/> Operator <input type="checkbox"/> Both  If the Applicant is not both the owner and operator, please provide the name and address of the other party. <u>GSA, ROBERT C BYRD</u> <u>US COURTHOUSE ROOM 1620</u> <u>300 Virginia St East</u> <u>Charleston, WV 25301</u>
<b>8. Number of onsite employees:</b>  500	
<b>9. Governmental Code:</b>  <input type="checkbox"/> Privately owned and operated; 0 <input type="checkbox"/> County government owned and operated; 3 <input checked="" type="checkbox"/> Federally owned and operated; 1 <input type="checkbox"/> Municipality government owned and operated; 4 <input type="checkbox"/> State government owned and operated; 2 <input type="checkbox"/> District government owned and operated; 5	

**10. Business Confidentiality Claims**

Does this application include confidential information (per 45CSR31)? ☐ Yes    x ☒ No

If yes, identify each segment of information on each page that is submitted as confidential, and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's "PRECAUTIONARY NOTICE-CLAIMS OF CONFIDENTIALITY" guidance.

**11. Mailing Address**

**Street or P.O. Box:** 250 MURALL DIRVE

**City:** KEARNEYSVILLE

**State:** WV

**Zip:** 25430-5200

**Telephone Number:** (304) 264-5516

**Fax Number:** (304)- 264-5596

**12. Facility Location**

**Street:** 250 MURALL DRIVE

**City:** KEARNEYSVILLE

**County:** BERKELEY

**UTM Easting:** 248.928      km

**UTM Northing:** 4365.127      km

**Zone:** 17    or    18

**Directions:** Take I-81 to WV Exit 12 (WV-45/Winchester Avenue/Charles Town), turn onto WV-45 East bound (Apple Harvest Dr.). Drive for 2.0 miles until WV-45 East bound becomes WV-9 East bound (Charles Town Road), Drive for 3.7 miles on WV-9 East bound (Charles Town Road), Turn right onto Short Rd., Make an immediate left onto Murall Drive, Drive for 0.2 miles on Murall Drive to arrive at the site.

**Portable Source?**    ☐ Yes    x ☒ No

**Is facility located within a nonattainment area?**    ☐ Yes    x ☒ No

**If yes, for what air pollutants?**

**Is facility located within 50 miles of another state?**    x ☒ Yes    ☐ No

**If yes, name the affected state(s).**

Maryland

Virginia

<p>Is facility located within 100 km of a Class I Area<sup>1</sup>? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If no, do emissions impact a Class I Area<sup>1</sup>? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>If yes, name the area(s).</p>
<p><sup>1</sup> Class I areas include Dolly Sods and Otter Creek Wilderness Areas in West Virginia, and Shenandoah National Park and James River Face Wilderness Area in Virginia.</p>	

<b>13. Contact Information</b>		
<b>Responsible Official:</b> Jeffery Bosley		<b>Title:</b> Building Manager
<b>Street or P.O. Box:</b> 250 Murall Drive		
<b>City:</b> Kearneysville	<b>State:</b> WV	<b>Zip:</b> -25430
<b>Telephone Number:</b> (304) 264-5385	<b>Fax Number:</b> (304) 264-5596	
<b>E-mail address:</b> JEFFERY.A.BOSLELY@IRS.GOV		
<b>Environmental Contact:</b> CATHY ORR		<b>Title:</b> ENVIRONMENTAL COORDINATOR
<b>Street or P.O. Box:</b> 250 MURALL DRIVE		
<b>City:</b> KEARNEYSVILLE	<b>State:</b> WV	<b>Zip:</b> 25430-
<b>Telephone Number:</b> (304) -264-5516	<b>Fax Number:</b> (304) 264-5596	
<b>E-mail address:</b> CATHY.M.ORR@IRS.GOV		
<b>Application Preparer:</b> CATHY ORR		<b>Title:</b> ENVIRONMENTAL COORDINATOR
<b>Company:</b> IRS		
<b>Street or P.O. Box:</b> 250 MURALL DRIVE		
<b>City:</b> KEARNEYSVILLE	<b>State:</b> WV	<b>Zip:</b> 25430-
<b>Telephone Number:</b> (304) 264-5516	<b>Fax Number:</b> (304) 264-5596	
<b>E-mail address:</b> CATHY.M.ORR@IRS.GOV		

**14. Facility Description**

List all processes, products, NAICS and SIC codes for normal operation, in order of priority. Also list any process, products, NAICS and SIC codes associated with any alternative operating scenarios if different from those listed for normal operation.

Process	Products	NAICS	SIC
BOILERS	NO.2 FUEL OIL	92113	9311
EMERGENCY GENERATORS	NO.2 FUEL OIL	92113	9311

**Provide a general description of operations.**

The Main Building is equipped with four 5.25 MMBTU/hr boilers identified as B-1.1, B-1.2, B-1.3, and B-1.4 which provide space heating for the Main Building. These boilers each operate using No. 2 Fuel Oil at a design rate of 35.7 gallons per hour. Their No. 2 Fuel Oil is supplied from three underground storage tanks (T-04-001C, T-04-002C, and T-04-003C). All four boilers vent to a common stack (B2-001CS) and are not equipped with any air pollution control devices.

The Main building is also equipped with ten emergency generators (ENG-1 through ENG-10) to supply emergency power. These generators are approximately 1,900 HP each and will be limited to 500 hours of operation each per year. All ten emergency generators operate using No. 2 fuel oil and each have a small 500 gallon day tank (ENG1-DT through ENG-10-DT). These day tanks are supplied fuel by the three underground storage tanks mentioned above.

The Annex is equipped with two 1.62 MMBTU/hr boilers identified as B2-001A and B2-002A which provide space heating for the Annex. These boilers each operate using No. 2 fuel oil at a design rate of 11.6 gallons per hour. The No. 2 fuel oil is supplied from an underground storage tank (T4-001A). Each boiler vents to its own stack (B2-001A and B2-002S) and neither of the stacks are equipped with any air pollution control devices.

The Annex is also equipped with five emergency generators to supply emergency power. These generators are approximately 1900 HP each and will be limited to 500 hours of operations each year. All five emergency generators operate using No. 2 fuel oil and receive fuel from five small 100 gallon tanks (T3-001A through T3-005A). These five tanks are supplied fuel by a larger 2500 gallon aboveground tank (T3-006A). T3-006A is supplied fuel from the underground storage tank mentioned above.



- |     |  |
|-----|--|
| 15. | Provide an <b>Area Map</b> showing plant location as <b>ATTACHMENT A</b> .   |
| 16. | Provide a <b>Plot Plan(s)</b> , e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is located as <b>ATTACHMENT B</b> . For instructions, refer to "Plot Plan - Guidelines." |
| 17. | Provide a detailed <b>Process Flow Diagram(s)</b> showing each process or emissions unit as <b>ATTACHMENT C</b> . Process Flow Diagrams should show all emission units, control equipment, emission points, and their relationships. |

**Section 2: Applicable Requirements**

<b>18. Applicable Requirements Summary</b>	
Instructions: Mark all applicable requirements.	
<input type="checkbox"/> SIP	<input type="checkbox"/> FIP
<input checked="" type="checkbox"/> Minor source NSR (45CSR13)	<input type="checkbox"/> PSD (45CSR14)
<input type="checkbox"/> NESHAP (45CSR34)	<input type="checkbox"/> Nonattainment NSR (45CSR19)
<input type="checkbox"/> Section 111 NSPS	<input checked="" type="checkbox"/> Section 112(d) MACT standards
<input type="checkbox"/> Section 112(g) Case-by-case MACT	<input type="checkbox"/> 112(r) RMP
<input type="checkbox"/> Section 112(i) Early reduction of HAP	<input type="checkbox"/> Consumer/commercial prod. reqts., section 183(e)
<input type="checkbox"/> Section 129 Standards/Reqts.	<input type="checkbox"/> Stratospheric ozone (Title VI)
<input type="checkbox"/> Tank vessel reqt., section 183(f)	<input type="checkbox"/> Emissions cap 45CSR§30-2.6.1
<input type="checkbox"/> NAAQS, increments or visibility (temp. sources)	<input type="checkbox"/> 45CSR27 State enforceable only rule
<input type="checkbox"/> 45CSR4 State enforceable only rule	<input type="checkbox"/> Acid Rain (Title IV, 45CSR33)
<input type="checkbox"/> Emissions Trading and Banking (45CSR28)	<input type="checkbox"/> Compliance Assurance Monitoring (40CFR64)
<input type="checkbox"/> CAIR NO <sub>x</sub> Annual Trading Program (45CSR39)	<input type="checkbox"/> CAIR NO <sub>x</sub> Ozone Season Trading Program (45CSR40)
<input type="checkbox"/> CAIR SO <sub>2</sub> Trading Program (45CSR41)	

<b>19. Non Applicability Determinations</b>
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**List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.**

45CSR10 – To Prevent and Control air Pollution From Emissions of Sulfur Oxides. Each of the boilers has a maximum design heat input of less than 10 MMBtu/hr and are not subject to 45CSR10 per 45CSR 10-10-1.

40 CFR part 60 subpart Dc – Standards of Performance for fossil-fuel-fired steam generators for which construction is commenced after June 9, 1989 does not apply because each of the boilers are less than the applicability size of 10 MMBtu/hr.

40 CFR Part 60 Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (including petroleum liquid storage vessels) for which construction, reconstruction or modification commenced after July 23, 1984 does not apply because the fuel oil that IRS acquires has vapor pressure less than 15.0 kPa (=2.175566 psi), 40 CFR 60.110b(b). The tanks at this facility do not meet any requirements. Thus, the tanks are not listed in the permit.

40CFR Part 60 Subpart III – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. The ten (10) 2,628 hp and five (5) 2,167 hp compression ignition, internal combustion engines were manufactured before July 11, 2005. Thus these engines are not subject to 40 CFR Part 60 Subpart III.

40 CFR Part 60 Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. The ten (10) 2,628 hp and five (5) 2,167 hp are not spark ignition internal combustion engines. These engines were also manufactured before June 12, 2006. Thus, these engines are not subject to 40 cfr Part 60 Subpart JJJJ.

40 CFR Part 63 Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. The facility's fifteen (15) emergency generator sets are not subject to 40 CFR Part 63 subpart ZZZZ since construction commenced before June 12, 2006 the facility is not a major source of HAPs.

40 CFR Part 64 Compliance Assurance Monitoring (CAM) – CAM applies to any pollutant specific emissions units (PSEU) that satisfy all of the applicability criteria requirements of 40 CFR 64.2 (a) i.e., that: (1) have pre-control regulated pollutant potential emissions (PTE) equal to or greater than the major threshold limits to be classified as a major source; (2) are subject to an emission limitation or standard and (3) have a control device to achieve compliance with such emission limitation or standard. Since this facility does not have any control devices, it is not subject to the CAM rule.

☐ Permit Shield

**19. Non Applicability Determinations (Continued) - Attach additional pages as necessary.**

List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.

☐ Permit Shield

## 20. Facility-Wide Applicable Requirements

List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements).

45CSR6-3.1.1 – Open burning  
45CSR61.145(b) and 45CSR34 – Asbestos  
45CSR4-3.1 – Odor  
45CSR13-10.5 - Permanent shutdown  
45CSR11-5.2 – Standby plan for reducing emissions  
WV Code 22-5-4(a)(14-115) and 45CSR13 – Stack Testing  
45CSR2-3.1 Visible emissions  
45CSR4 – Retention of records  
45CSR30 - Operating fee

☐ Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing / recordkeeping / reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

45CSR6-3.1.1 – Open burning – Record Keeping (3.1.1)  
45CSR61.145(b) and 45CSR34 – Asbestos – No asbestos materials within the complex (3.1.3)  
45CSR4-3.1 – Odor - Record Keeping (3.1.4)  
45CSR13-10.5 - Permanent shutdown – record keeping (3.1.5)  
45CSR11-5.2 – Standby plan for reducing emissions – Record Keeping (3.1.6)  
45CSR2-3.1 Visible emissions – Stack Testing – Record Keeping of Opacity visible emissions (3.3.1)  
45CSR4 – Retention of records – record keeping (3.4.1)  
45CSR30 - Operating fee – Copy of paid fees – (3.5.4.1)

Are you in compliance with all facility-wide applicable requirements? x ☐ Yes ☐ No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

**20. Facility-Wide Applicable Requirements (Continued) - Attach additional pages as necessary.**

**List all facility-wide applicable requirements. For each applicable requirement, include the rule citation and/or permit with the condition number.**

☐ Permit Shield

**For all facility-wide applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

**Are you in compliance with all facility-wide applicable requirements?** x ☐ Yes ☐ No

**If no, complete the Schedule of Compliance Form as ATTACHMENT F.**

## 21. Active Permits/Consent Orders

[illegible]

## 22. Inactive Permits/Obsolete Permit Conditions

[illegible]



**Section 3: Facility-Wide Emissions**

23. Facility-Wide Emissions Summary [Tons per Year]	
Criteria Pollutants	Potential Emissions
Carbon Monoxide (CO)	4.6 TPY
Nitrogen Oxides (NO <sub>x</sub> )	3.11 TPY
Lead (Pb)	
Particulate Matter (PM <sub>2.5</sub> ) <sup>1</sup>	
Particulate Matter (PM <sub>10</sub> ) <sup>1</sup>	.34 TPY
Total Particulate Matter (TSP)	
Sulfur Dioxide (SO <sub>2</sub> )	4.42 TPY
Volatile Organic Compounds (VOC)	.20 TPY
Hazardous Air Pollutants <sup>2</sup>	Potential Emissions
Regulated Pollutants other than Criteria and HAP	Potential Emissions

<sup>1</sup>PM<sub>2.5</sub> and PM<sub>10</sub> are components of TSP.  
<sup>2</sup>For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.

**Section 4: Insignificant Activities**

24. Insignificant Activities (Check all that apply)	
<input checked="" type="checkbox"/> <input type="checkbox"/>	1. Air compressors and pneumatically operated equipment, including hand tools.
<input checked="" type="checkbox"/> <input type="checkbox"/>	2. Air contaminant detectors or recorders, combustion controllers or shutoffs.
<input checked="" type="checkbox"/> <input type="checkbox"/>	3. Any consumer product used in the same manner as in normal consumer use, provided the use results in a duration and frequency of exposure which are not greater than those experienced by consumer, and which may include, but not be limited to, personal use items; janitorial cleaning supplies, office supplies and supplies to maintain copying equipment.
<input checked="" type="checkbox"/> <input type="checkbox"/>	4. Bathroom/toilet vent emissions.
<input checked="" type="checkbox"/> <input type="checkbox"/>	5. Batteries and battery charging stations, except at battery manufacturing plants.
<input type="checkbox"/>	6. Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents. Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description.
<input type="checkbox"/>	7. Blacksmith forges.
<input type="checkbox"/>	8. Boiler water treatment operations, not including cooling towers.
<input type="checkbox"/>	9. Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source.
<input type="checkbox"/>	10. CO <sub>2</sub> lasers, used only on metals and other materials which do not emit HAP in the process.
<input type="checkbox"/>	11. Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.
<input checked="" type="checkbox"/> <input type="checkbox"/>	12. Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel.
<input type="checkbox"/>	13. Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment.
<input type="checkbox"/>	14. Demineralized water tanks and demineralizer vents.
<input type="checkbox"/>	15. Drop hammers or hydraulic presses for forging or metalworking.
<input type="checkbox"/>	16. Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam.
<input type="checkbox"/>	17. Emergency (backup) electrical generators at residential locations.
<input type="checkbox"/>	18. Emergency road flares.
<input type="checkbox"/>	<p>19. Emission units which do not have any applicable requirements and which emit criteria pollutants (CO, NO<sub>x</sub>, SO<sub>2</sub>, VOC and PM) into the atmosphere at a rate of less than 1 pound per hour and less than 10,000 pounds per year aggregate total for each criteria pollutant from all emission units.</p> <p>Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>

24. Insignificant Activities (Check all that apply)	
<input type="checkbox"/>	<p>20. Emission units which do not have any applicable requirements and which emit hazardous air pollutants into the atmosphere at a rate of less than 0.1 pounds per hour and less than 1,000 pounds per year aggregate total for all HAPs from all emission sources. This limitation cannot be used for any source which emits dioxin/furans nor for toxic air pollutants as per 45CSR27.</p> <p>Please specify all emission units for which this exemption applies along with the quantity of hazardous air pollutants emitted on an hourly and annual basis:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
<input type="checkbox"/>	21. Environmental chambers not using hazardous air pollutant (HAP) gases.
<input type="checkbox"/>	22. Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption.
<input type="checkbox"/>	23. Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.
<input type="checkbox"/>	24. Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
<input type="checkbox"/>	25. Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP.
<input type="checkbox"/>	26. Fire suppression systems.
<input type="checkbox"/>	27. Firefighting equipment and the equipment used to train firefighters.
<input type="checkbox"/>	28. Flares used solely to indicate danger to the public.
<input type="checkbox"/>	29. Fugitive emission related to movement of passenger vehicle provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.
<input type="checkbox"/>	30. Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.
<input type="checkbox"/>	31. Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.
<input type="checkbox"/>	32. Humidity chambers.
<input type="checkbox"/>	33. Hydraulic and hydrostatic testing equipment.
<input type="checkbox"/>	34. Indoor or outdoor kerosene heaters.
<input type="checkbox"/>	35. Internal combustion engines used for landscaping purposes.
<input type="checkbox"/>	36. Laser trimmers using dust collection to prevent fugitive emissions.
<input type="checkbox"/>	37. Laundry activities, except for dry-cleaning and steam boilers.
<input type="checkbox"/>	38. Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
<input type="checkbox"/>	39. Oxygen scavenging (de-aeration) of water.
<input type="checkbox"/>	40. Ozone generators.

24. Insignificant Activities (Check all that apply)	
<input type="checkbox"/>	41. Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification. (Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant owners/operators must still get a permit if otherwise requested.)
<input type="checkbox"/>	42. Portable electrical generators that can be moved by hand from one location to another. "Moved by Hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device.
X <input type="checkbox"/>	43. Process water filtration systems and demineralizers.
<input type="checkbox"/>	44. Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification.
<input type="checkbox"/>	45. Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified.
<input type="checkbox"/>	46. Routing calibration and maintenance of laboratory equipment or other analytical instruments.
<input type="checkbox"/>	47. Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers.
<input type="checkbox"/>	48. Shock chambers.
<input type="checkbox"/>	49. Solar simulators.
<input type="checkbox"/>	50. Space heaters operating by direct heat transfer.
<input type="checkbox"/>	51. Steam cleaning operations.
<input type="checkbox"/>	52. Steam leaks.
<input type="checkbox"/>	53. Steam sterilizers.
<input type="checkbox"/>	54. Steam vents and safety relief valves.
<input type="checkbox"/>	55. Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
X <input type="checkbox"/>	56. Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP. Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.
<input type="checkbox"/>	57. Such other sources or activities as the Director may determine.
<input type="checkbox"/>	58. Tobacco smoking rooms and areas.
<input type="checkbox"/>	59. Vents from continuous emissions monitors and other analyzers.

**Section 5: Emission Units, Control Devices, and Emission Points**

<b>25. Equipment Table</b>
Fill out the <b>Title V Equipment Table</b> and provide it as <b>ATTACHMENT D</b> .
<b>26. Emission Units</b>
For each emission unit listed in the <b>Title V Equipment Table</b> , fill out and provide an <b>Emission Unit Form</b> as <b>ATTACHMENT E</b> .
For each emission unit not in compliance with an applicable requirement, fill out a <b>Schedule of Compliance Form</b> as <b>ATTACHMENT F</b> .
<b>27. Control Devices</b>
For each control device listed in the <b>Title V Equipment Table</b> , fill out and provide an <b>Air Pollution Control Device Form</b> as <b>ATTACHMENT G</b> .
For any control device that is required on an emission unit in order to meet a standard or limitation for which the potential pre-control device emissions of an applicable regulated air pollutant is greater than or equal to the Title V Major Source Threshold Level, refer to the <b>Compliance Assurance Monitoring (CAM) Form(s)</b> for CAM applicability. Fill out and provide these forms, if applicable, for each Pollutant Specific Emission Unit (PSEU) as <b>ATTACHMENT H</b> .

## Section 6: Certification of Information

### 28. Certification of Truth, Accuracy and Completeness and Certification of Compliance

*Note: This Certification must be signed by a responsible official. The **original**, signed in **blue ink**, must be submitted with the application. Applications without an **original** signed certification will be considered as incomplete.*

#### a. Certification of Truth, Accuracy and Completeness

I certify that I am a responsible official (as defined at 45CSR§30-2.38) and am accordingly authorized to make this submission on behalf of the owners or operators of the source described in this document and its attachments. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine and/or imprisonment.

#### b. Compliance Certification

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

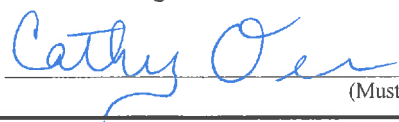
#### Responsible official (type or print)

Name: Cathy Orr

Title: Environmental Coordinator

#### Responsible official's signature:

Signature:



Signature Date:

1/3/2017

(Must be signed and dated in blue ink)

#### Note: Please check all applicable attachments included with this permit application:

- |                                     |  |
|-------------------------------------|--|
| <input checked="" type="checkbox"/> | ATTACHMENT A: Area Map                       |
| <input checked="" type="checkbox"/> | ATTACHMENT B: Plot Plan(s)                   |
| <input checked="" type="checkbox"/> | ATTACHMENT C: Process Flow Diagram(s)        |
| <input checked="" type="checkbox"/> | ATTACHMENT D: Equipment Table                |
| <input checked="" type="checkbox"/> | ATTACHMENT E: Emission Unit Form(s)          |
| <input type="checkbox"/>            | ATTACHMENT F: Schedule of Compliance Form(s) |

<input type="checkbox"/>	ATTACHMENT G: Air Pollution Control Device Form(s)
<input type="checkbox"/>	ATTACHMENT H: Compliance Assurance Monitoring (CAM) Form(s)

***All of the required forms and additional information can be found and downloaded from, the DEP website at [www.dep.wv.gov/daq](http://www.dep.wv.gov/daq), requested by phone (304) 926-0475, and/or obtained through the mail.***

## Attachment A – Area Map

Figure A-1 & A-2 are the Area Maps of the Martinsburg Computing Center showing the Main building and the Annex/Annex Office Expansion location in relation to nearby road.



Figure A1 is an overview site map of the facility that displays the location of the existing facility.



UTM Coordinates:

UTM Northing (KM): 4365.127

UTM Easting (KM): 248.928

NAVD 88 Elevation (FT): 482

Figure A-2 is a USGS 7.5 minute topographic area map showing the current location of the Facility including topography and UTM Coordinates.



## Attachment B – Plot Plan

Figure E-1 and E-2 are Plot Plans of the Martinsburg Computing Center showing the Main building and the Annex layout and the approximate location of the boilers, emergency generators and fuel storage tanks.

FIGURE E-1  
MAIN BUILDING PLOT PLAN

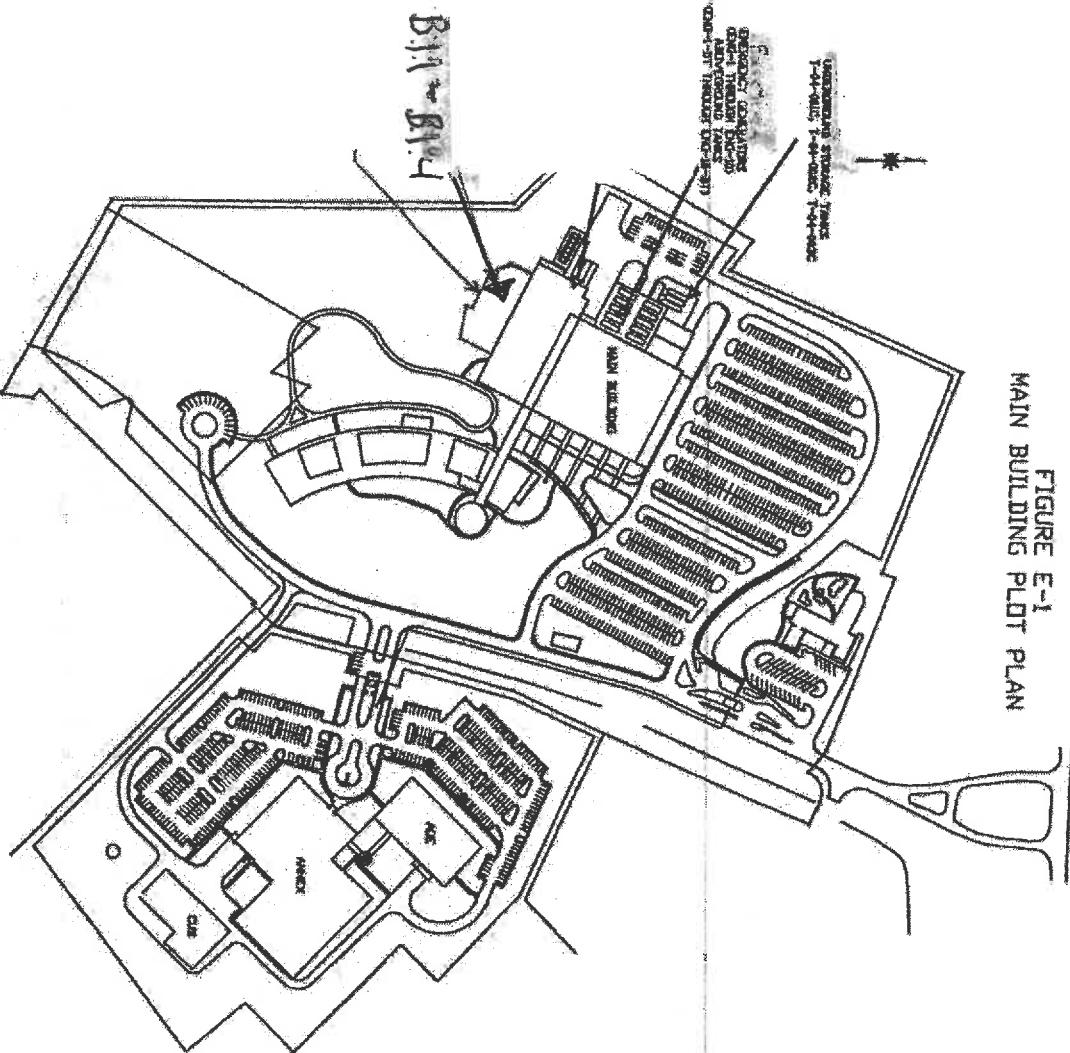
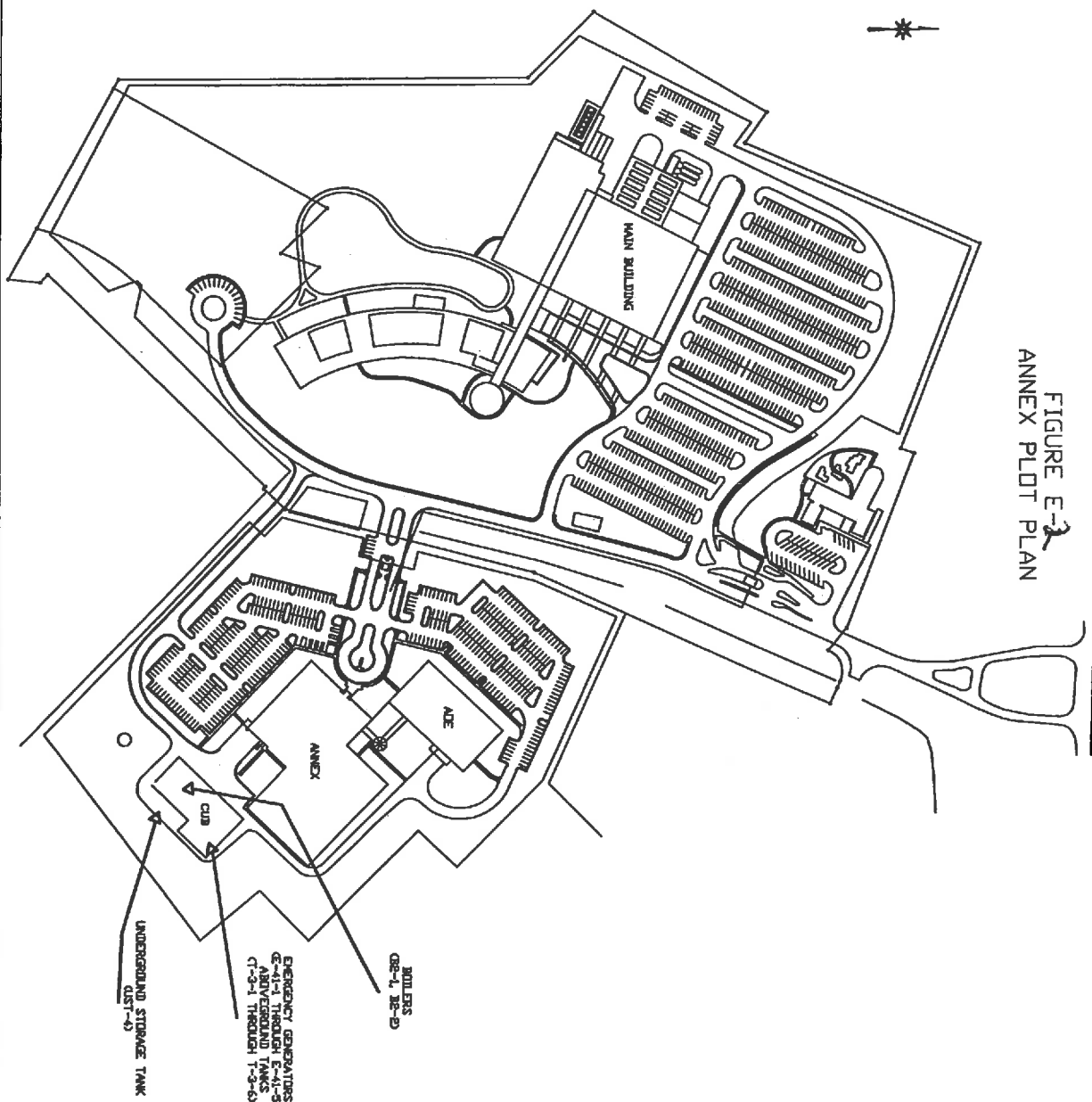


FIGURE E-2  
ANNEX PLOT PLAN

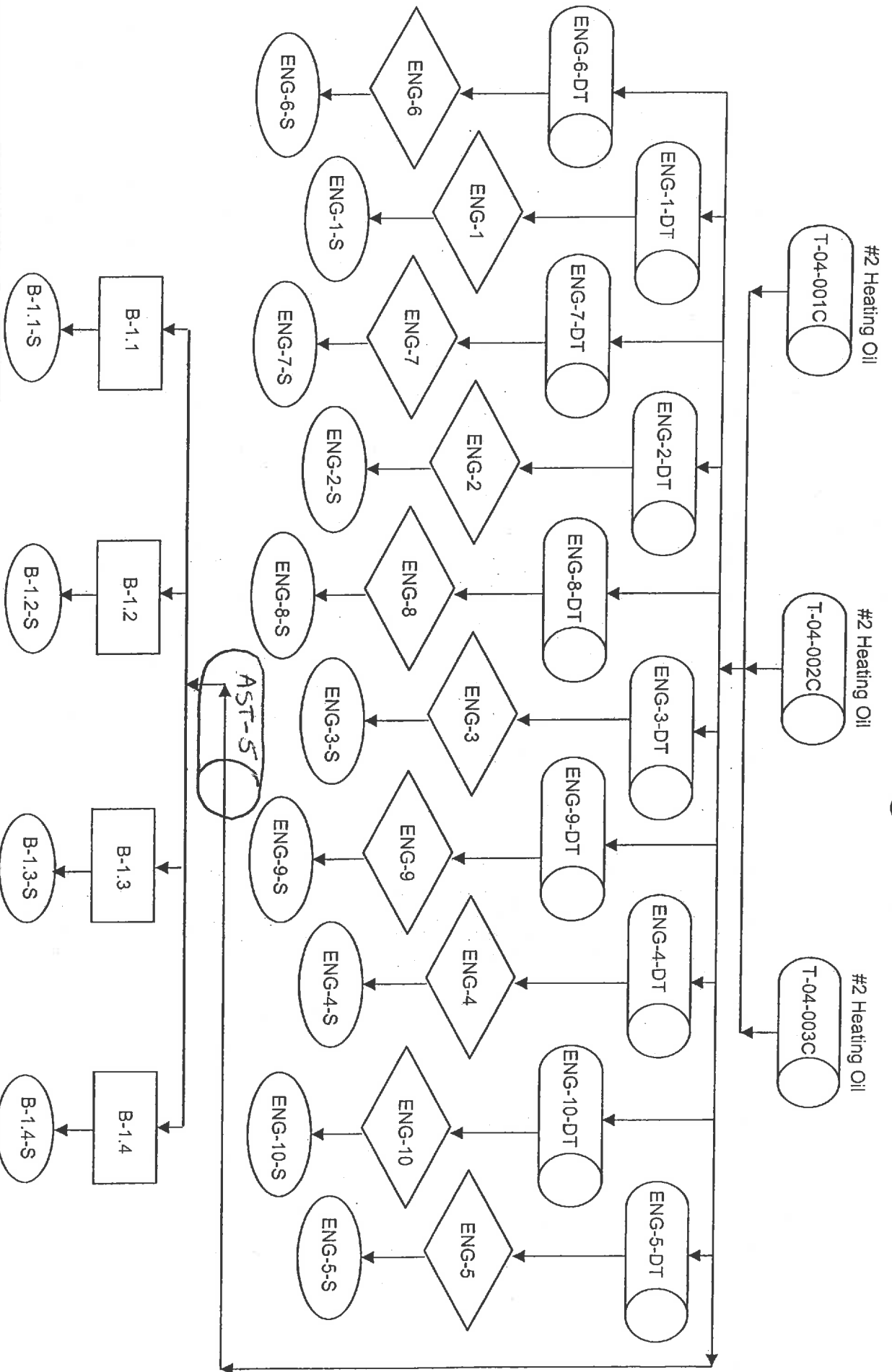


## Attachment C – Detailed Process Flow Diagrams

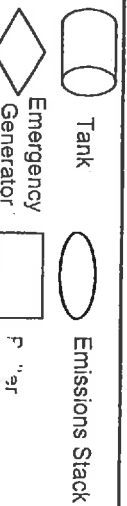
Figure C-1 is a detailed process flow diagram for the Main Building air emission sources including the boilers, emergency generators and all associated fuel storage tanks.

Figure C-2 is a detailed process flow diagram for the Annex Building air emission sources including the boilers, emergency generators and all associated fuel storage tanks.

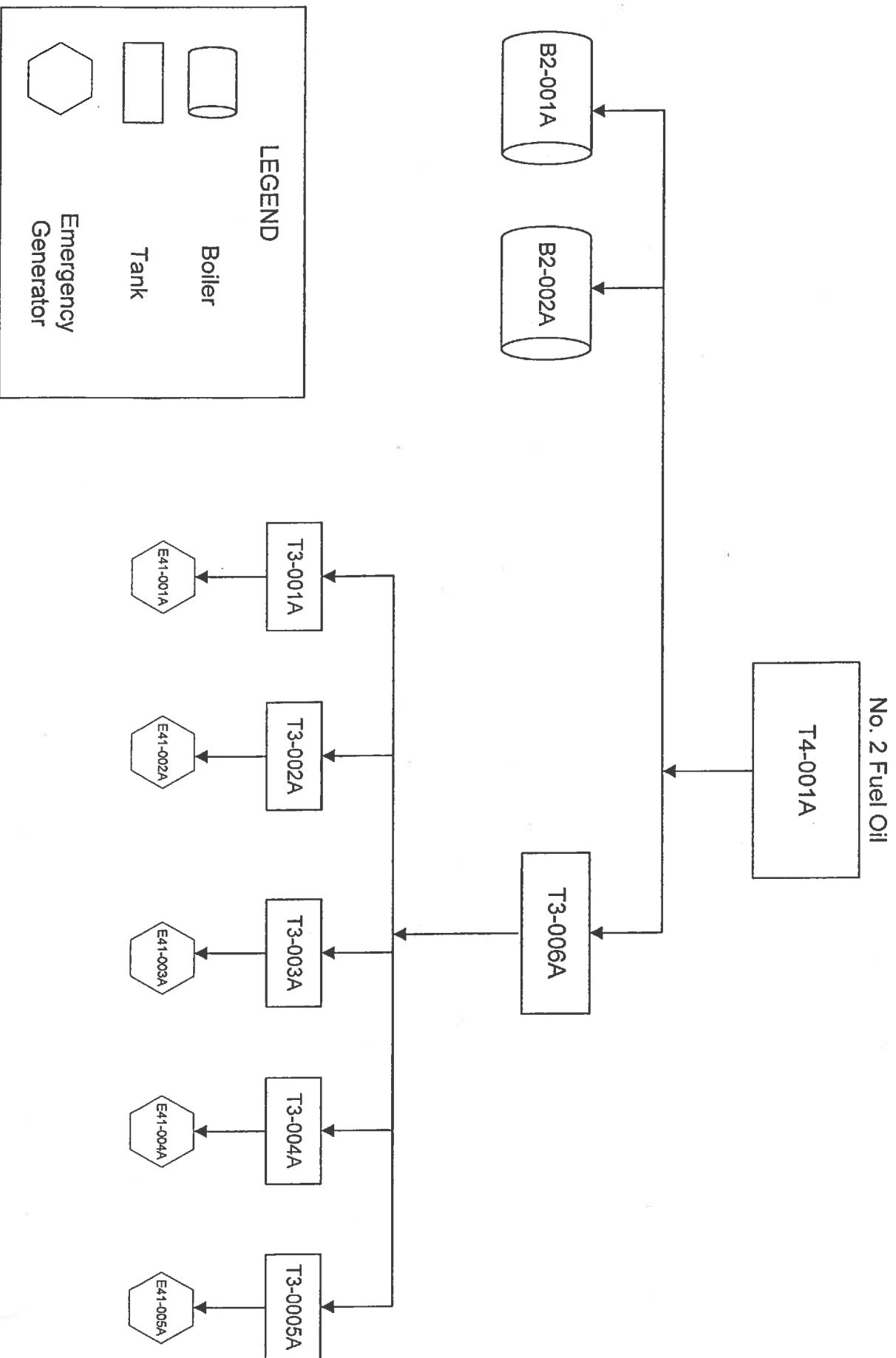
# Main Building



Process Flow Diagram for Main Building  
250 Mural Drive  
Kearneysville, WV 25430-5200



# ANNEX BUILDING – DETAILED PROCESS FLOW DIAGRAM





**ATTACHMENT D - Title V Equipment Table**  
(includes all emission units at the facility except those designated as  
insignificant activities in Section 4, Item 24 of the General Forms)

Emission Point ID <sup>1</sup>	Control Device <sup>1</sup>	Emission Unit ID <sup>1</sup>	Emission Unit Description	Design Capacity	Year Installed/Modified
E41-001AS	NOT APPLICABLE	E41-001A	EMERGENCY GENERATOR	1917 (HP)	1995
E41-002AS	NOT APPLICABLE	E41-002A	EMERGENCY GENERATOR	1917 (HP)	1995
E41-003AS	NOT APPLICABLE	E41-003A	EMERGENCY GENERATOR	1917 (HP)	1995
E41-004AS	NOT APPLICABLE	E41-004A	EMERGENCY GENERATOR	1917 (HP)	1995
E41-005AS	NOT APPLICABLE	E41-005A	EMERGENCY GENERATOR	1917 (HP)	1995
B2-001A-S	NOT APPLICABLE	B2-001A	BOILER	1.624	1995
B2-002A-S	NOT APPLICABLE	B2-001A	BOILER	1.624 (MMBTU/hr)	1995
ENG-1	NOT APPLICABLE	ENG-1-S	EMERGENCY GENERATOR	2,680 HP	1999
ENG-2	NOT APPLICABLE	ENG-2-S	EMERGENCY GENERATOR	2,680 HP	1999
ENG-3	NOT APPLICABLE	ENG-3-S	EMERGENCY GENERATOR	2,680 HP	1999
ENG-4	NOT APPLICABLE	ENG-4-S	EMERGENCY GENERATOR	2,680 HP	1999
ENG-5	NOT APPLICABLE	ENG-5-S	EMERGENCY GENERATOR	2,680 HP	1999
ENG-6	NOT APPLICABLE	ENG-6-S	EMERGENCY GENERATOR	2,680 HP	1999
ENG-7	NOT APPLICABLE	ENG-7-S	EMERGENCY GENERATOR	2,680 HP	1999
ENG-8	NOT APPLICABLE	ENG-8-S	EMERGENCY GENERATOR	2,680 HP	1999
ENG-9	NOT APPLICABLE	ENG-9-S	EMERGENCY GENERATOR	2,680 HP	1999
ENG-10	NOT APPLICABLE	ENG-10-S	EMERGENCY GENERATOR	2,680 HP	1999
B-1.1	NOT APPLICABLE	B-1.1-S	BOILER	5MMBtu/hr	2012
B-1.2	NOT APPLICABLE	B-1.2-S	BOILER	5MMBtu/hr	2012
B-1.3	NOT APPLICABLE	B-1.3-S	BOILER	5MMBtu/hr	2012
B-1.4	NOT APPLICABLE	B-1.4-S	BOILER	5MMBtu/hr	2012
NOT APPLICABLE	NOT APPLICABLE	T-04-001C	NO. 2 FUEL OIL TANK	25000 GAL	1999
NOT APPLICABLE	NOT APPLICABLE	T-04-002C	NO. 2 FUEL OIL TANK	25000 GAL	1999

NOT APPLICAB	NOT APPLICAB	T-04-003C	NO. 2 FUEL OIL TANK	25000 GAL	1999
NOT APPLICAB	NOT APPLICAB	T-4-001A	NO. 2 FUEL OIL TANK	25000 GAL	1995
NOT APPLICABLE	NOT APPLICABLE	T-3-001A	NO. 2 FUEL OIL TANK	25000 GAL	1995

<sup>1</sup>For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description*

<b>Emission unit ID number:</b> B-1.1.S, B-1.2.S, B-1.3.S, B-1.4.S	<b>Emission unit name:</b> BOILER	<b>List any control devices associated with this emission unit:</b>  NONE
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**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**  
Four identical boilers with #2 fuel oil burners designed for 4200 MBH output (each), sized for 2N redundant operation.

<b>Manufacturer:</b> BYRAN STEAM LLC	<b>Model number:</b> RV500-W-FDO	<b>Serial number:</b> B-1.1: 99651; 1.2: 98624; 1.3: 98622; 1.4: 98623.
<b>Construction date:</b> 03/15/2013	<b>Installation date:</b> 04/14/2014	<b>Modification date(s): (combustion air system)</b> 01/15/2015

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** 35.7 GPH max (each)

<b>Maximum Hourly Throughput:</b> 35.7 GPH	<b>Maximum Annual Throughput:</b> 312732	<b>Maximum Operating Schedule:</b> 24 HOURS A DAY 52 WEEKS A YEAR
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### *Fuel Usage Data (fill out all applicable fields)*

<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, is it?</b>  <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
<b>Maximum design heat input and/or maximum horsepower rating:</b> 4200 MBH (each)	<b>Type and Btu/hr rating of burners:</b> POWER FLAME BURNER MODEL NO. C4A-OA

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**  
NO. 2 FUEL OIL @ 35.7143 GPH

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
NO. 2 FUEL OIL	.2%	0%	

<b>Emissions Data</b>			
Criteria Pollutants	Potential Emissions		
	PPH	TPY	
Carbon Monoxide (CO)	.95	4.16	
Nitrogen Oxides (NO <sub>x</sub> )	.71	3.11	
Lead (Pb)			
Particulate Matter (PM <sub>2.5</sub> )			
Particulate Matter (PM <sub>10</sub> )			
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO <sub>2</sub> )	1.01	4.42	
Volatile Organic Compounds (VOC)			
Hazardous Air Pollutants	Potential Emissions		
	PPH	TPY	
Regulated Pollutants other than Criteria and HAP	Potential Emissions		
	PPH	TPY	
<b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b>			

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Sulfur content of the heating oil will not exceed 0.5%.

\_\_\_\_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

The facility will comply with all required recordkeeping and reporting specified under the permit.

Are you in compliance with all applicable requirements for this emission unit? X\_\_ Yes \_\_\_\_ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description*

<b>Emission unit ID number:</b> ENG-1	<b>Emission unit name:</b> Main Building – Emergency Generator ENG-1	<b>List any control devices associated with this emission unit:</b> None
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**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Emergency Generator used for backup electrical power within the Main Building of the Enterprise Computing Center

<b>Manufacturer:</b> Caterpillar	<b>Model number:</b> 3516B	<b>Serial number:</b> 7RN00434
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<b>Construction date:</b> Unknown	<b>Installation date:</b> 1999	<b>Modification date(s):</b> N/A
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**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** 2,628 HP

<b>Maximum Hourly Throughput:</b> 6.682 MMBTU	<b>Maximum Annual Throughput:</b> 3,341 MMBTU	<b>Maximum Operating Schedule:</b> 500 hours per year
--	--	--

**Fuel Usage Data (fill out all applicable fields)**

<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
--	---

<b>Maximum design heat input and/or maximum horsepower rating:</b> 2,628 HP	<b>Type and Btu/hr rating of burners:</b> 6.682 MMBTU/hr
--	---

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

#2 Heating Oil – maximum 6.682 MMBTU per hour, or 3,341 MMBTU per year

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
#2 Heating Oil	0.5%	Unavailable	140,000BTU/gal

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	14.45	3.614
Nitrogen Oxides (NO <sub>x</sub> )	63.07	15.77
Lead (Pb)	unavailable	unavailable
Particulate Matter (PM <sub>2.5</sub> )	1.840	0.4599
Particulate Matter (PM <sub>10</sub> )	1.840	0.4599
Total Particulate Matter (TSP)	1.840	0.4599
Sulfur Dioxide (SO <sub>2</sub> )	10.63	2.658
Volatile Organic Compounds (VOC)	1.853	0.4632
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	0.005185	0.001296
Toluene	0.001878	0.0004694
Propylene	0.01864	0.004660
Total PAH	0.001417	0.0003541
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		

**List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).**

Based on AP-42 Emissions Factors, Section 3.4 – Tables 3.4-1 (diesel fuel), Table 3.4-3 and 3.4-4 (dated 1996)

**Applicable Requirements**

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Sulfur content of the heating oil will not exceed 0.5%.

       Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

The facility will comply with all required recordkeeping and reporting specified under this permit.

Are you in compliance with all applicable requirements for this emission unit? ☒ Yes ☐ No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.



## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description*

<b>Emission unit ID number:</b> ENG-2	<b>Emission unit name:</b> Main Building – Emergency Generator ENG-2	<b>List any control devices associated with this emission unit:</b> None
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**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Emergency Generator used for backup electrical power within the Main Building of the Enterprise Computing Center

<b>Manufacturer:</b> Caterpillar	<b>Model number:</b> 3516B	<b>Serial number:</b> 7RN00438
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<b>Construction date:</b> Unknown	<b>Installation date:</b> 1999	<b>Modification date(s):</b> N/A
--------------------------------------	-----------------------------------	-------------------------------------

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** 2,628 HP

<b>Maximum Hourly Throughput:</b> 6.682 MMBTU	<b>Maximum Annual Throughput:</b> 3,341 MMBTU	<b>Maximum Operating Schedule:</b> 500 hours per year
--	--	--

### *Fuel Usage Data (fill out all applicable fields)*

<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, is it?</b>  <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
--	---

<b>Maximum design heat input and/or maximum horsepower rating:</b> 2,628 HP	<b>Type and Btu/hr rating of burners:</b> 6.682 MMBTU/hr
--	---

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

#2 Heating Oil – maximum 6.682 MMBTU per hour, or 3,341 MMBTU per year

### **Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
#2 Heating Oil	0.5%	Unavailable	140,000BTU/gal

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	14.45	3.614
Nitrogen Oxides (NO <sub>x</sub> )	63.07	15.77
Lead (Pb)	unavailable	unavailable
Particulate Matter (PM <sub>2.5</sub> )	1.840	0.4599
Particulate Matter (PM <sub>10</sub> )	1.840	0.4599
Total Particulate Matter (TSP)	1.840	0.4599
Sulfur Dioxide (SO <sub>2</sub> )	10.63	2.658
Volatile Organic Compounds (VOC)	1.853	0.4632
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	0.005185	0.001296
Toluene	0.001878	0.0004694
Propylene	0.01864	0.004660
Total PAH	0.001417	0.0003541
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		

**List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).**

Based on AP-42 Emissions Factors, Section 3.4 – Tables 3.4-1 (diesel fuel), Table 3.4-3 and 3.4-4 (dated 1996)

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Sulfur content of the heating oil will not exceed 0.5%.

☐ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

The facility will comply with all required recordkeeping and reporting specified under this permit.

Are you in compliance with all applicable requirements for this emission unit? ☒ Yes ☐ No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description*

**Emission unit ID number:**

ENG-3

**Emission unit name:**

Main Building – Emergency  
Generator ENG-3

**List any control devices associated  
with this emission unit:**

None

**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Emergency Generator used for backup electrical power within the Main Building of the Enterprise Computing Center

**Manufacturer:**

Caterpillar

**Model number:**

3516B

**Serial number:**

7RN00435

**Construction date:**

Unknown

**Installation date:**

1999

**Modification date(s):**

N/A

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** 2,628 HP

**Maximum Hourly Throughput:**

6.682 MMBTU

**Maximum Annual Throughput:**

3,341 MMBTU

**Maximum Operating Schedule:**

500 hours per year

### *Fuel Usage Data (fill out all applicable fields)*

**Does this emission unit combust fuel?** ☒ Yes ☐ No

**If yes, is it?**

☐ Indirect Fired ☒ Direct Fired

**Maximum design heat input and/or maximum horsepower rating:**

2,628 HP

**Type and Btu/hr rating of burners:**

6.682 MMBTU/hr

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

#2 Heating Oil – maximum 6.682 MMBTU per hour, or 3,341 MMBTU per year

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
#2 Heating Oil	0.5%	Unavailable	140,000BTU/gal

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	14.45	3.614
Nitrogen Oxides (NO <sub>x</sub> )	63.07	15.77
Lead (Pb)	unavailable	unavailable
Particulate Matter (PM <sub>2.5</sub> )	1.840	0.4599
Particulate Matter (PM <sub>10</sub> )	1.840	0.4599
Total Particulate Matter (TSP)	1.840	0.4599
Sulfur Dioxide (SO <sub>2</sub> )	10.63	2.658
Volatile Organic Compounds (VOC)	1.853	0.4632
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	0.005185	0.001296
Toluene	0.001878	0.0004694
Propylene	0.01864	0.004660
Total PAH	0.001417	0.0003541
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		

**List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).**

Based on AP-42 Emissions Factors, Section 3.4 – Tables 3.4-1 (diesel fuel), Table 3.4-3 and 3.4-4 (dated 1996)

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Sulfur content of the heating oil will not exceed 0.5%.

       Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

The facility will comply with all required recordkeeping and reporting specified under this permit.

Are you in compliance with all applicable requirements for this emission unit?   X   Yes        No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description*

**Emission unit ID number:**

ENG-4

**Emission unit name:**

Main Building – Emergency  
Generator ENG-4

**List any control devices associated  
with this emission unit:**

None

**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Emergency Generator used for backup electrical power within the Main Building of the Enterprise Computing Center

**Manufacturer:**

Caterpillar

**Model number:**

3516B

**Serial number:**

7RN00433

**Construction date:**

Unknown

**Installation date:**

1999

**Modification date(s):**

N/A

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** 2,628 HP

**Maximum Hourly Throughput:**

6.682 MMBTU

**Maximum Annual Throughput:**

3,341 MMBTU

**Maximum Operating Schedule:**

500 hours per year

### *Fuel Usage Data (fill out all applicable fields)*

**Does this emission unit combust fuel?** ☒ Yes ☐ No

**If yes, is it?**

☐ Indirect Fired ☒ Direct Fired

**Maximum design heat input and/or maximum horsepower rating:**

2,628 HP

**Type and Btu/hr rating of burners:**

6.682 MMBTU/hr

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

#2 Heating Oil – maximum 6.682 MMBTU per hour, or 3,341 MMBTU per year

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
#2 Heating Oil	0.5%	Unavailable	140,000BTU/gal

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	14.45	3.614
Nitrogen Oxides (NO <sub>x</sub> )	63.07	15.77
Lead (Pb)	unavailable	unavailable
Particulate Matter (PM <sub>2.5</sub> )	1.840	0.4599
Particulate Matter (PM <sub>10</sub> )	1.840	0.4599
Total Particulate Matter (TSP)	1.840	0.4599
Sulfur Dioxide (SO <sub>2</sub> )	10.63	2.658
Volatile Organic Compounds (VOC)	1.853	0.4632
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	0.005185	0.001296
Toluene	0.001878	0.0004694
Propylene	0.01864	0.004660
Total PAH	0.001417	0.0003541
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Based on AP-42 Emissions Factors, Section 3.4 – Tables 3.4-1 (diesel fuel), Table 3.4-3 and 3.4-4 (dated 1996)</p>		



***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Sulfur content of the heating oil will not exceed 0.5%.

       Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

The facility will comply with all required recordkeeping and reporting specified under this permit.

Are you in compliance with all applicable requirements for this emission unit?   X   Yes        No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description*

**Emission unit ID number:**

ENG-5

**Emission unit name:**

Main Building – Emergency  
Generator ENG-5

**List any control devices associated  
with this emission unit:**

None

**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Emergency Generator used for backup electrical power within the Main Building of the Enterprise Computing Center

**Manufacturer:**

Caterpillar

**Model number:**

3516B

**Serial number:**

7RN00432

**Construction date:**

Unknown

**Installation date:**

1999

**Modification date(s):**

N/A

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** 2,628 HP

**Maximum Hourly Throughput:**

6.682 MMBTU

**Maximum Annual Throughput:**

3,341 MMBTU

**Maximum Operating Schedule:**

500 hours per year

### *Fuel Usage Data (fill out all applicable fields)*

**Does this emission unit combust fuel?** ☒ Yes ☐ No

**If yes, is it?**

☐ Indirect Fired ☒ Direct Fired

**Maximum design heat input and/or maximum horsepower rating:**

2,628 HP

**Type and Btu/hr rating of burners:**

6.682 MMBTU/hr

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

#2 Heating Oil – maximum 6.682 MMBTU per hour, or 3,341 MMBTU per year

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
#2 Heating Oil	0.5%	Unavailable	140,000BTU/gal

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	14.45	3.614
Nitrogen Oxides (NO <sub>x</sub> )	63.07	15.77
Lead (Pb)	unavailable	unavailable
Particulate Matter (PM <sub>2.5</sub> )	1.840	0.4599
Particulate Matter (PM <sub>10</sub> )	1.840	0.4599
Total Particulate Matter (TSP)	1.840	0.4599
Sulfur Dioxide (SO <sub>2</sub> )	10.63	2.658
Volatile Organic Compounds (VOC)	1.853	0.4632
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	0.005185	0.001296
Toluene	0.001878	0.0004694
Propylene	0.01864	0.004660
Total PAH	0.001417	0.0003541
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		

**List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).**

Based on AP-42 Emissions Factors, Section 3.4 – Tables 3.4-1 (diesel fuel), Table 3.4-3 and 3.4-4 (dated 1996)

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Sulfur content of the heating oil will not exceed 0.5%.

☐ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

The facility will comply with all required recordkeeping and reporting specified under this permit.

Are you in compliance with all applicable requirements for this emission unit? ☒ Yes ☐ No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description*

<b>Emission unit ID number:</b> ENG-6	<b>Emission unit name:</b> Main Building -- Emergency Generator ENG-6	<b>List any control devices associated with this emission unit:</b> None
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**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Emergency Generator used for backup electrical power within the Main Building of the Enterprise Computing Center

<b>Manufacturer:</b> Caterpillar	<b>Model number:</b> 3516B	<b>Serial number:</b> 7RN00437
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<b>Construction date:</b> Unknown	<b>Installation date:</b> 1999	<b>Modification date(s):</b> N/A
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**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** 2,628 HP

<b>Maximum Hourly Throughput:</b> 6.682 MMBTU	<b>Maximum Annual Throughput:</b> 3,341 MMBTU	<b>Maximum Operating Schedule:</b> 500 hours per year
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### *Fuel Usage Data (fill out all applicable fields)*

<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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<b>Maximum design heat input and/or maximum horsepower rating:</b> 2,628 HP	<b>Type and Btu/hr rating of burners:</b> 6.682 MMBTU/hr
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**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

#2 Heating Oil – maximum 6.682 MMBTU per hour, or 3,341 MMBTU per year

### **Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
#2 Heating Oil	0.5%	Unavailable	140,000BTU/gal

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	14.45	3.614
Nitrogen Oxides (NO <sub>x</sub> )	63.07	15.77
Lead (Pb)	unavailable	unavailable
Particulate Matter (PM <sub>2.5</sub> )	1.840	0.4599
Particulate Matter (PM <sub>10</sub> )	1.840	0.4599
Total Particulate Matter (TSP)	1.840	0.4599
Sulfur Dioxide (SO <sub>2</sub> )	10.63	2.658
Volatile Organic Compounds (VOC)	1.853	0.4632
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	0.005185	0.001296
Toluene	0.001878	0.0004694
Propylene	0.01864	0.004660
Total PAH	0.001417	0.0003541
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		

**List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).**

Based on AP-42 Emissions Factors, Section 3.4 – Tables 3.4-1 (diesel fuel), Table 3.4-3 and 3.4-4 (dated 1996)

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Sulfur content of the heating oil will not exceed 0.5%.

☐ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

The facility will comply with all required recordkeeping and reporting specified under this permit.

Are you in compliance with all applicable requirements for this emission unit? ☒ Yes ☐ No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description*

**Emission unit ID number:**

ENG-7

**Emission unit name:**

Main Building – Emergency  
Generator ENG-7

**List any control devices associated  
with this emission unit:**

None

**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Emergency Generator used for backup electrical power within the Main Building of the Enterprise Computing Center

**Manufacturer:**

Caterpillar

**Model number:**

3516B

**Serial number:**

7RN00429

**Construction date:**

Unknown

**Installation date:**

1999

**Modification date(s):**

N/A

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** 2,628 HP

**Maximum Hourly Throughput:**

6.682 MMBTU

**Maximum Annual Throughput:**

3,341 MMBTU

**Maximum Operating Schedule:**

500 hours per year

### *Fuel Usage Data (fill out all applicable fields)*

**Does this emission unit combust fuel?** ☒ Yes ☐ No

**If yes, is it?**

☐ Indirect Fired ☒ Direct Fired

**Maximum design heat input and/or maximum horsepower rating:**

2,628 HP

**Type and Btu/hr rating of burners:**

6.682 MMBTU/hr

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

#2 Heating Oil – maximum 6.682 MMBTU per hour, or 3,341 MMBTU per year

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
#2 Heating Oil	0.5%	Unavailable	140,000BTU/gal



<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	14.45	3.614
Nitrogen Oxides (NO <sub>x</sub> )	63.07	15.77
Lead (Pb)	unavailable	unavailable
Particulate Matter (PM <sub>2.5</sub> )	1.840	0.4599
Particulate Matter (PM <sub>10</sub> )	1.840	0.4599
Total Particulate Matter (TSP)	1.840	0.4599
Sulfur Dioxide (SO <sub>2</sub> )	10.63	2.658
Volatile Organic Compounds (VOC)	1.853	0.4632
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	0.005185	0.001296
Toluene	0.001878	0.0004694
Propylene	0.01864	0.004660
Total PAH	0.001417	0.0003541
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		

**List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).**

Based on AP-42 Emissions Factors, Section 3.4 – Tables 3.4-1 (diesel fuel), Table 3.4-3 and 3.4-4 (dated 1996)

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Sulfur content of the heating oil will not exceed 0.5%.

☐ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

The facility will comply with all required recordkeeping and reporting specified under this permit.

Are you in compliance with all applicable requirements for this emission unit? ☒ Yes ☐ No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description*

<b>Emission unit ID number:</b> ENG-8	<b>Emission unit name:</b> Main Building – Emergency Generator ENG-8	<b>List any control devices associated with this emission unit:</b> None
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**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Emergency Generator used for backup electrical power within the Main Building of the Enterprise Computing Center

<b>Manufacturer:</b> Caterpillar	<b>Model number:</b> 3516B	<b>Serial number:</b> 7RN00430
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<b>Construction date:</b> Unknown	<b>Installation date:</b> 1999	<b>Modification date(s):</b> N/A
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**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** 2,628 HP

<b>Maximum Hourly Throughput:</b> 6.682 MMBTU	<b>Maximum Annual Throughput:</b> 3,341 MMBTU	<b>Maximum Operating Schedule:</b> 500 hours per year
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### *Fuel Usage Data (fill out all applicable fields)*

<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, is it?</b>  <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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<b>Maximum design heat input and/or maximum horsepower rating:</b> 2,628 HP	<b>Type and Btu/hr rating of burners:</b> 6.682 MMBTU/hr
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**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

#2 Heating Oil – maximum 6.682 MMBTU per hour, or 3,341 MMBTU per year

### **Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
#2 Heating Oil	0.5%	Unavailable	140,000BTU/gal

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	14.45	3.614
Nitrogen Oxides (NO <sub>x</sub> )	63.07	15.77
Lead (Pb)	unavailable	unavailable
Particulate Matter (PM <sub>2.5</sub> )	1.840	0.4599
Particulate Matter (PM <sub>10</sub> )	1.840	0.4599
Total Particulate Matter (TSP)	1.840	0.4599
Sulfur Dioxide (SO <sub>2</sub> )	10.63	2.658
Volatile Organic Compounds (VOC)	1.853	0.4632
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	0.005185	0.001296
Toluene	0.001878	0.0004694
Propylene	0.01864	0.004660
Total PAH	0.001417	0.0003541
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		

**List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).**

Based on AP-42 Emissions Factors, Section 3.4 – Tables 3.4-1 (diesel fuel), Table 3.4-3 and 3.4-4 (dated 1996)

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Sulfur content of the heating oil will not exceed 0.5%.

☐ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

The facility will comply with all required recordkeeping and reporting specified under this permit.

Are you in compliance with all applicable requirements for this emission unit? ☒ Yes ☐ No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description*

**Emission unit ID number:**

ENG-9

**Emission unit name:**

Main Building – Emergency  
Generator ENG-9

**List any control devices associated  
with this emission unit:**

None

**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Emergency Generator used for backup electrical power within the Main Building of the Enterprise Computing Center

**Manufacturer:**

Caterpillar

**Model number:**

3516B

**Serial number:**

7RN00431

**Construction date:**

Unknown

**Installation date:**

1999

**Modification date(s):**

N/A

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** 2,628 HP

**Maximum Hourly Throughput:**

6.682 MMBTU

**Maximum Annual Throughput:**

3,341 MMBTU

**Maximum Operating Schedule:**

500 hours per year

### *Fuel Usage Data (fill out all applicable fields)*

**Does this emission unit combust fuel?** ☒ Yes ☐ No

**If yes, is it?**

☐ Indirect Fired ☒ Direct Fired

**Maximum design heat input and/or maximum horsepower rating:**

2,628 HP

**Type and Btu/hr rating of burners:**

6.682 MMBTU/hr

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

#2 Heating Oil – maximum 6.682 MMBTU per hour, or 3,341 MMBTU per year

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
#2 Heating Oil	0.5%	Unavailable	140,000BTU/gal

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	14.45	3.614
Nitrogen Oxides (NO <sub>x</sub> )	63.07	15.77
Lead (Pb)	unavailable	unavailable
Particulate Matter (PM <sub>2.5</sub> )	1.840	0.4599
Particulate Matter (PM <sub>10</sub> )	1.840	0.4599
Total Particulate Matter (TSP)	1.840	0.4599
Sulfur Dioxide (SO <sub>2</sub> )	10.63	2.658
Volatile Organic Compounds (VOC)	1.853	0.4632
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	0.005185	0.001296
Toluene	0.001878	0.0004694
Propylene	0.01864	0.004660
Total PAH	0.001417	0.0003541
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		

**List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).**

Based on AP-42 Emissions Factors, Section 3.4 – Tables 3.4-1 (diesel fuel), Table 3.4-3 and 3.4-4 (dated 1996)

**Applicable Requirements**

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Sulfur content of the heating oil will not exceed 0.5%.

\_\_\_\_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

The facility will comply with all required recordkeeping and reporting specified under this permit.

Are you in compliance with all applicable requirements for this emission unit? ☒ Yes ☐ No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.



## ATTACHMENT E - Emission Unit Form

### Emission Unit Description

<b>Emission unit ID number:</b> ENG-10	<b>Emission unit name:</b> Main Building – Emergency Generator ENG-10	<b>List any control devices associated with this emission unit:</b> None
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**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Emergency Generator used for backup electrical power within the Main Building of the Enterprise Computing Center

<b>Manufacturer:</b> Caterpillar	<b>Model number:</b> 3516B	<b>Serial number:</b> 7RN00428
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<b>Construction date:</b> Unknown	<b>Installation date:</b> 1999	<b>Modification date(s):</b> N/A
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**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** 2,628 HP

<b>Maximum Hourly Throughput:</b> 6.682 MMBTU	<b>Maximum Annual Throughput:</b> 3,341 MMBTU	<b>Maximum Operating Schedule:</b> 500 hours per year
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### Fuel Usage Data (fill out all applicable fields)

<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, is it?</b>  <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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<b>Maximum design heat input and/or maximum horsepower rating:</b> 2,628 HP	<b>Type and Btu/hr rating of burners:</b> 6.682 MMBTU/hr
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**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

#2 Heating Oil – maximum 6.682 MMBTU per hour, or 3,341 MMBTU per year

### Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
#2 Heating Oil	0.5%	Unavailable	140,000BTU/gal

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	14.45	3.614
Nitrogen Oxides (NO <sub>x</sub> )	63.07	15.77
Lead (Pb)	unavailable	unavailable
Particulate Matter (PM <sub>2.5</sub> )	1.840	0.4599
Particulate Matter (PM <sub>10</sub> )	1.840	0.4599
Total Particulate Matter (TSP)	1.840	0.4599
Sulfur Dioxide (SO <sub>2</sub> )	10.63	2.658
Volatile Organic Compounds (VOC)	1.853	0.4632
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	0.005185	0.001296
Toluene	0.001878	0.0004694
Propylene	0.01864	0.004660
Total PAH	0.001417	0.0003541
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Based on AP-42 Emissions Factors, Section 3.4 – Tables 3.4-1 (diesel fuel), Table 3.4-3 and 3.4-4 (dated 1996)</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Sulfur content of the heating oil will not exceed 0.5%.

\_\_\_\_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

The facility will comply with all required recordkeeping and reporting specified under this permit.

Are you in compliance with all applicable requirements for this emission unit? ☒ Yes ☐ No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description*

<b>Emission unit ID number:</b> B2-001A	<b>Emission unit name:</b> Annex - Boiler B-2-1	<b>List any control devices associated with this emission unit:</b> None
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**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Boiler used for space heating within the Annex of the Enterprise Computing Center

<b>Manufacturer:</b> Weil McLain	<b>Model number:</b> P-1278-W	<b>Serial number:</b> Not Available
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<b>Construction date:</b> 1995	<b>Installation date:</b> 1995	<b>Modification date(s):</b> N/A
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**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** 1.624 MMBTU/Hour

<b>Maximum Hourly Throughput:</b> 11.6 gallons per hour	<b>Maximum Annual Throughput:</b> 101,616 gallons	<b>Maximum Operating Schedule:</b> 8,760 hours per year
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### *Fuel Usage Data (fill out all applicable fields)*

<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, is it?</b> <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
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<b>Maximum design heat input and/or maximum horsepower rating:</b> 1.624 MMBTU per hour	<b>Type and Btu/hr rating of burners:</b> 1.624 MMBTU per hour
--	---

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

#2 Heating Oil – maximum 11.6 gallons per hour, or 101,616 gallons per year

### **Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
#2 Heating Oil	0.5%	Unavailable	140,000BTU/gal

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.0580	0.2540
Nitrogen Oxides (NO <sub>x</sub> )	0.2320	1.016
Lead (Pb)	0.00001462	0.00006402
Particulate Matter (PM <sub>2.5</sub> )	0.009628	0.04217
Particulate Matter (PM <sub>10</sub> )	0.01253	0.05487
Total Particulate Matter (TSP)	0.02320	0.1016
Sulfur Dioxide (SO <sub>2</sub> )	0.8236	3.607
Volatile Organic Compounds (VOC)	0.006450	0.02825
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Selenium	0.00002436	0.0001067
Manganese	0.000009744	0.00004268
Copper	0.000009744	0.00004268
Arsenic	0.000006496	0.00002845
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		

**List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).**

Based on AP-42 Emissions Factors, Section 1.3 – Tables 1.3-1 (distillate oil, #2 heating oil for boilers <100 MMBTU/Hour, Table 1.3-3, Table 1.3-7, Table 1.3-9 and Table 1.3-10 (dated 1998)

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Sulfur content of the heating oil will not exceed 0.5%.

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For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

The facility will comply with all required recordkeeping and reporting specified under this permit.

Are you in compliance with all applicable requirements for this emission unit? ☒ Yes ☐ No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description*

<b>Emission unit ID number:</b> B2-002A	<b>Emission unit name:</b> Annex - Boiler B-2-2	<b>List any control devices associated with this emission unit:</b> None
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**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Boiler used for space heating within the Annex of the Enterprise Computing Center

<b>Manufacturer:</b> Weil McLain	<b>Model number:</b> P-1278-W	<b>Serial number:</b> Not Available
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<b>Construction date:</b> 1995	<b>Installation date:</b> 1995	<b>Modification date(s):</b> N/A
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**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** 1.624 MMBTU/Hour

<b>Maximum Hourly Throughput:</b> 11.6 gallons per hour	<b>Maximum Annual Throughput:</b> 101,616 gallons	<b>Maximum Operating Schedule:</b> 8,760 hours per year
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### *Fuel Usage Data (fill out all applicable fields)*

<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, is it?</b> <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
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<b>Maximum design heat input and/or maximum horsepower rating:</b> 1.624 MMBTU per hour	<b>Type and Btu/hr rating of burners:</b> 1.624 MMBTU per hour
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**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

#2 Heating Oil – maximum 11.6 gallons per hour, or 101,616 gallons per year

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
#2 Heating Oil	0.5%	Unavailable	140,000BTU/gal

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.0580	0.2540
Nitrogen Oxides (NO <sub>x</sub> )	0.2320	1.016
Lead (Pb)	0.00001462	0.00006402
Particulate Matter (PM <sub>2.5</sub> )	0.009628	0.04217
Particulate Matter (PM <sub>10</sub> )	0.01253	0.05487
Total Particulate Matter (TSP)	0.02320	0.1016
Sulfur Dioxide (SO <sub>2</sub> )	0.8236	3.607
Volatile Organic Compounds (VOC)	0.006450	0.02825
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Selenium	0.00002436	0.0001067
Manganese	0.000009744	0.00004268
Copper	0.000009744	0.00004268
Arsenic	0.000006496	0.00002845
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		

**List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).**

Based on AP-42 Emissions Factors, Section 1.3 – Tables 1.3-1 (distillate oil, #2 heating oil for boilers <100 MMBTU/Hour, Table 1.3-3, Table 1.3-7, Table 1.3-9 and Table 1.3-10 (dated 1998)



**Applicable Requirements**

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Sulfur content of the heating oil will not exceed 0.5%.

☐ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

The facility will comply with all required recordkeeping and reporting specified under this permit.

Are you in compliance with all applicable requirements for this emission unit? ☒ Yes ☐ No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description*

<b>Emission unit ID number:</b> E-41-1	<b>Emission unit name:</b> Annex – Emergency Generator E-41-1	<b>List any control devices associated with this emission unit:</b> None
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**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Emergency Generator used for backup electrical power within the Annex of the Enterprise Computing Center

<b>Manufacturer:</b> Caterpillar	<b>Model number:</b> 3516B	<b>Serial number:</b> 25Z04312
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<b>Construction date:</b> Unknown	<b>Installation date:</b> 1995	<b>Modification date(s):</b> N/A
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**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** 2,146 HP

<b>Maximum Hourly Throughput:</b> 5.455 MMBTU	<b>Maximum Annual Throughput:</b> 2,728 MMBTU	<b>Maximum Operating Schedule:</b> 500 hours per year
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### *Fuel Usage Data (fill out all applicable fields)*

<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, is it?</b> ___ Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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<b>Maximum design heat input and/or maximum horsepower rating:</b> 2,146 HP	<b>Type and Btu/hr rating of burners:</b> 5.455 MMBTU/hr
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**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

#2 Heating Oil – maximum 5.455 MMBTU per hour, or 2,728 MMBTU per year

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
#2 Heating Oil	0.5%	Unavailable	140,000BTU/gal

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	11.80	2.951
Nitrogen Oxides (NO <sub>x</sub> )	51.50	12.88
Lead (Pb)	unavailable	unavailable
Particulate Matter (PM <sub>2.5</sub> )	1.502	0.3756
Particulate Matter (PM <sub>10</sub> )	1.502	0.3756
Total Particulate Matter (TSP)	1.502	0.3756
Sulfur Dioxide (SO <sub>2</sub> )	8.681	2.170
Volatile Organic Compounds (VOC)	1.513	0.3782
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	0.004233	0.001058
Toluene	0.001533	0.0003832
Propylene	0.01522	0.003805
Total PAH	0.001156	0.0002891
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Based on AP-42 Emissions Factors, Section 3.4 – Tables 3.4-1 (diesel fuel), Table 3.4-3 and 3.4-4 (dated 1996)</p>		

**Applicable Requirements**

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Sulfur content of the heating oil will not exceed 0.5%.

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For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

The facility will comply with all required recordkeeping and reporting specified under this permit.

Are you in compliance with all applicable requirements for this emission unit? ☒ Yes ☐ No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description*

<b>Emission unit ID number:</b> E-41-2	<b>Emission unit name:</b> Annex – Emergency Generator E-41-2	<b>List any control devices associated with this emission unit:</b> None
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**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Emergency Generator used for backup electrical power within the Annex of the Enterprise Computing Center

<b>Manufacturer:</b> Caterpillar	<b>Model number:</b> 3516B	<b>Serial number:</b> 25Z04316
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<b>Construction date:</b> Unknown	<b>Installation date:</b> 1995	<b>Modification date(s):</b> N/A
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**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** 2,146 HP

<b>Maximum Hourly Throughput:</b> 5.455 MMBTU	<b>Maximum Annual Throughput:</b> 2,728 MMBTU	<b>Maximum Operating Schedule:</b> 500 hours per year
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### *Fuel Usage Data (fill out all applicable fields)*

<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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<b>Maximum design heat input and/or maximum horsepower rating:</b> 2,146 HP	<b>Type and Btu/hr rating of burners:</b> 5.455 MMBTU/hr
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**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

#2 Heating Oil – maximum 5.455 MMBTU per hour, or 2,728 MMBTU per year

### **Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
#2 Heating Oil	0.5%	Unavailable	140,000BTU/gal

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	11.80	2.951
Nitrogen Oxides (NO <sub>x</sub> )	51.50	12.88
Lead (Pb)	unavailable	unavailable
Particulate Matter (PM <sub>2.5</sub> )	1.502	0.3756
Particulate Matter (PM <sub>10</sub> )	1.502	0.3756
Total Particulate Matter (TSP)	1.502	0.3756
Sulfur Dioxide (SO <sub>2</sub> )	8.681	2.170
Volatile Organic Compounds (VOC)	1.513	0.3782
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	0.004233	0.001058
Toluene	0.001533	0.0003832
Propylene	0.01522	0.003805
Total PAH	0.001156	0.0002891
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		

**List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).**

Based on AP-42 Emissions Factors, Section 3.4 – Tables 3.4-1 (diesel fuel), Table 3.4-3 and 3.4-4 (dated 1996)

**Applicable Requirements**

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Sulfur content of the heating oil will not exceed 0.5%.

☐ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

The facility will comply with all required recordkeeping and reporting specified under this permit.

Are you in compliance with all applicable requirements for this emission unit? ☒ Yes ☐ No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description*

<b>Emission unit ID number:</b> E-41-3	<b>Emission unit name:</b> Annex – Emergency Generator E-41-3	<b>List any control devices associated with this emission unit:</b> None
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**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Emergency Generator used for backup electrical power within the Annex of the Enterprise Computing Center

<b>Manufacturer:</b> Caterpillar	<b>Model number:</b> 3516B	<b>Serial number:</b> 25Z04306
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<b>Construction date:</b> Unknown	<b>Installation date:</b> 1995	<b>Modification date(s):</b> N/A
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**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** 2,146 HP

<b>Maximum Hourly Throughput:</b> 5.455 MMBTU	<b>Maximum Annual Throughput:</b> 2,728 MMBTU	<b>Maximum Operating Schedule:</b> 500 hours per year
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### *Fuel Usage Data (fill out all applicable fields)*

<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, is it?</b>  <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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<b>Maximum design heat input and/or maximum horsepower rating:</b> 2,146 HP	<b>Type and Btu/hr rating of burners:</b> 5.455 MMBTU/hr
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**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

#2 Heating Oil – maximum 5.455 MMBTU per hour, or 2,728 MMBTU per year

### **Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
#2 Heating Oil	0.5%	Unavailable	140,000BTU/gal



<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	11.80	2.951
Nitrogen Oxides (NO <sub>x</sub> )	51.50	12.88
Lead (Pb)	unavailable	unavailable
Particulate Matter (PM <sub>2.5</sub> )	1.502	0.3756
Particulate Matter (PM <sub>10</sub> )	1.502	0.3756
Total Particulate Matter (TSP)	1.502	0.3756
Sulfur Dioxide (SO <sub>2</sub> )	8.681	2.170
Volatile Organic Compounds (VOC)	1.513	0.3782
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	0.004233	0.001058
Toluene	0.001533	0.0003832
Propylene	0.01522	0.003805
Total PAH	0.001156	0.0002891
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Based on AP-42 Emissions Factors, Section 3.4 – Tables 3.4-1 (diesel fuel), Table 3.4-3 and 3.4-4 (dated 1996)</p>		

**Applicable Requirements**

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Sulfur content of the heating oil will not exceed 0.5%.

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For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

The facility will comply with all required recordkeeping and reporting specified under this permit.

Are you in compliance with all applicable requirements for this emission unit? ☒ Yes ☐ No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description*

<b>Emission unit ID number:</b> E-41-4	<b>Emission unit name:</b> Annex – Emergency Generator E-41-4	<b>List any control devices associated with this emission unit:</b> None
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**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Emergency Generator used for backup electrical power within the Annex of the Enterprise Computing Center

<b>Manufacturer:</b> Caterpillar	<b>Model number:</b> 3516B	<b>Serial number:</b> 25Z04308
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<b>Construction date:</b> Unknown	<b>Installation date:</b> 1995	<b>Modification date(s):</b> N/A
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**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** 2,146 HP

<b>Maximum Hourly Throughput:</b> 5.455 MMBTU	<b>Maximum Annual Throughput:</b> 2,728 MMBTU	<b>Maximum Operating Schedule:</b> 500 hours per year
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### *Fuel Usage Data (fill out all applicable fields)*

<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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<b>Maximum design heat input and/or maximum horsepower rating:</b> 2,146 HP	<b>Type and Btu/hr rating of burners:</b> 5.455 MMBTU/hr
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**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

#2 Heating Oil – maximum 5.455 MMBTU per hour, or 2,728 MMBTU per year

### **Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
#2 Heating Oil	0.5%	Unavailable	140,000BTU/gal

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	11.80	2.951
Nitrogen Oxides (NO <sub>x</sub> )	51.50	12.88
Lead (Pb)	unavailable	unavailable
Particulate Matter (PM <sub>2.5</sub> )	1.502	0.3756
Particulate Matter (PM <sub>10</sub> )	1.502	0.3756
Total Particulate Matter (TSP)	1.502	0.3756
Sulfur Dioxide (SO <sub>2</sub> )	8.681	2.170
Volatile Organic Compounds (VOC)	1.513	0.3782
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	0.004233	0.001058
Toluene	0.001533	0.0003832
Propylene	0.01522	0.003805
Total PAH	0.001156	0.0002891
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Based on AP-42 Emissions Factors, Section 3.4 – Tables 3.4-1 (diesel fuel), Table 3.4-3 and 3.4-4 (dated 1996)</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Sulfur content of the heating oil will not exceed 0.5%.

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For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

The facility will comply with all required recordkeeping and reporting specified under this permit.

Are you in compliance with all applicable requirements for this emission unit? ☒ Yes ☐ No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description*

**Emission unit ID number:**

E-41-5

**Emission unit name:**

Annex – Emergency Generator

E-41-5

**List any control devices associated with this emission unit:**

None

**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Emergency Generator used for backup electrical power within the Annex of the Enterprise Computing Center

**Manufacturer:**

Caterpillar

**Model number:**

3516B

**Serial number:**

25Z04313

**Construction date:**

Unknown

**Installation date:**

1995

**Modification date(s):**

N/A

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** 2,146 HP

**Maximum Hourly Throughput:**

5.455 MMBTU

**Maximum Annual Throughput:**

2,728 MMBTU

**Maximum Operating Schedule:**

500 hours per year

### *Fuel Usage Data (fill out all applicable fields)*

**Does this emission unit combust fuel?** ☒ Yes ☐ No

**If yes, is it?**

☐ Indirect Fired ☒ Direct Fired

**Maximum design heat input and/or maximum horsepower rating:**

2,146 HP

**Type and Btu/hr rating of burners:**

5.455 MMBTU/hr

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

#2 Heating Oil – maximum 5.455 MMBTU per hour, or 2,728 MMBTU per year

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
#2 Heating Oil	0.5%	Unavailable	140,000BTU/gal

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	11.80	2.951
Nitrogen Oxides (NO <sub>x</sub> )	51.50	12.88
Lead (Pb)	unavailable	unavailable
Particulate Matter (PM <sub>2.5</sub> )	1.502	0.3756
Particulate Matter (PM <sub>10</sub> )	1.502	0.3756
Total Particulate Matter (TSP)	1.502	0.3756
Sulfur Dioxide (SO <sub>2</sub> )	8.681	2.170
Volatile Organic Compounds (VOC)	1.513	0.3782
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	0.004233	0.001058
Toluene	0.001533	0.0003832
Propylene	0.01522	0.003805
Total PAH	0.001156	0.0002891
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		

**List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).**

Based on AP-42 Emissions Factors, Section 3.4 – Tables 3.4-1 (diesel fuel), Table 3.4-3 and 3.4-4 (dated 1996)

**Applicable Requirements**

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Sulfur content of the heating oil will not exceed 0.5%.

☐ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

The facility will comply with all required recordkeeping and reporting specified under this permit.

Are you in compliance with all applicable requirements for this emission unit? ☒ Yes ☐ No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.